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IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER WALTER, CRAIG E	
			ART UNIT	PAPER NUMBER
			2188	
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			12/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/815,216

Applicant(s)

GREGG ET AL.

Examiner

Craig E. Walter

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-15, 19, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-15, 19, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- *8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-3, 7-15, 19, 21 and 22 are pending in the Application.
Claims 4-6, 16-18 and 20 are cancelled.
Claims 1, 7, 8, 13-15, 19 and 21 are amended.
Claims 1-3, 7-15, 19, 21 and 22 are rejected.

Response to Amendment

2. Applicant's amendments and arguments filed on 4 September 2007 in response to the office action mailed on 7 June 2007 have been fully considered, but they are not persuasive. Therefore, the rejections made in the previous office action are maintained, and restated below, with changes as needed to address the amendments.

Claim Objections

3. Claims 1-3, 7-15, 19, 21 and 22 are objected to because of the following informalities:

As for claims 1, 13 and 15, the word "pacing" should be changed to "placing" for clarity. See line 12 of claim 1 for example.

All claims depending on claims 1, 13 or 15 are objected to for inheriting the deficiency of each of their respective base claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-15, 19, 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As for claim 13, the "computer-readable medium" as recited in this claim is directed to both statutory (e.g. floppy disks) and non-statutory (e.g. transmission media) subject matter as per paragraph 0028, all lines of Applicant's original specification. As such, the claim is held to be non-statutory.

A similar rejection applies to claim 19, since the apparatus in the computer system is exclusively defined by code and a computer-readable medium (which includes non-statutory subject matter as discussed above). As such, the claim is held to be non-statutory.

Claims 14, 15, 21 and 22 are rejected for inheriting the deficiencies of each of their respective base claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 7-15, 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt et al. (US Patent 5,164,909), hereinafter Leonhardt, in view of Hwang (US Patent 6,058,082).

As for claim 1, Leonhardt discloses a method for implementing device selection in a robotic media library with multiple media types and multiple device types (Col. 1 Lines 40-52) comprising the steps of:

- storing a first indicator with predefined media information to identify a required technology for each media (Fig. 14 Volume Attributes 1401; data storage image includes definition of the type of media Col. 13 Lines 13-15);

- identifying an operation request to the robotic media library (Fig. 11 user requests access 1101);

- responsive to said operation request, checking for multiple device types in the robotic media library (Fig. 11 generate prioritized list of available media drives 1107);

- responsive to identifying the multiple device types in the robotic media library and a default value for said first indicator, selecting a first device type (Fig. 11 select media type 1106) and placing media in said selected device (Fig. 11 mount media element on selected drive 1111); and

- selecting a device of said selected first device type (Fig. 11 select specific media drive 1110).

Though Leonhardt further discloses the steps of checking for a successful operation (the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation), he does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang however teaches detecting an error and determining the type of media based on comparison (Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304).

Leonhardt and Hwang are from the same field of endeavor that is the art of handling multimedia devices. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used (Hwang Col. 1 Lines 32-39).

Additionally note, though Leonhardt does not expressly disclose selecting the newest device type in the robotic media library for said first device type, Examiner took official notice in the previous Office action (mailed 7 June 2007) that selecting the newest type of media as the first type is an obvious design choice in view of the need to write data on newly implemented media in order to phase out older media.

Applicant is entitled to traverse any/all official notice taken in the previous Non-final action. MPEP § 2144.03 (section C.) states, "[in order to] adequately traverse such

a finding [of Office Notice], an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241.... [i]f applicant does not traverse the examiner's assertion of official notice ... the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant ... failed to traverse the examiner's assertion of official notice...".

Since Applicant failed to traverse Examiner's assertion of Office notice in response to the previous Non-final Office action (7 June 2007), Examiner construes this limitation of selecting the newest device type as being commonly known in the art as admitted prior art, and the rejection is hereby made FINAL.

As for claim 2, Leonhardt discloses the steps responsive to said operation request, of setting a device type from said predefined media information (Fig. 11 review data file for attributes and constraints 1104 results in select media type 1106).

As for claim 3, Leonhardt discloses the step, of selecting said first device type includes the steps of storing a value representing said first device type for said first indicator (Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68).

As for claim 11, Leonhardt discloses the steps of storing a second indicator to describe each said device in said robotic media library (Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68).

As for claim 12, Leonhardt discloses the steps of storing said second indicator with predefined information for each said device in said robotic media library (Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68).

As for claims 13-15, Leonhardt discloses a computer-readable medium encoded with a computer program product (automated cartridge library software Fig. 1 Item 110, Col. 3 Line 30) for implementing device selection in a robotic media library in a computer system, said computer program product including instructions executed by the computer system to cause the computer system to perform the steps recited in claims 1-3. As such these claims are rejected based on the same rationale as claims 1-3, *supra*.

As for claim 19, Leonhardt discloses an apparatus in a computer system for implementing device selection in a robotic media library comprising:

a computer-readable medium encoded with a stored media information (Fig. 14 Volume Attributes 1401);

said computer-readable medium encoded with a first indicator stored with predefined media information to identify a required technology for each media (Fig. 14 Volume Attributes 1401; data storage image includes definition of the type of media Col. 13 Lines 13-15);

said computer-readable medium encoded with a device selection control program, said device selection control program including instructions executed by the computer system to cause the computer system to perform the steps (automated cartridge library software Fig. 1 Item 110, Col. 3 Line 30) of identifying an operation request to the robotic media library; responsive to said operation request, for checking for multiple device types in the robotic media library (Fig. 11 generate prioritized list of available media drives 1107); responsive to identifying the multiple device types in the robotic media library and a default value for said first indicator, for selecting a first device type (Fig. 11 select media type 1106);

selecting a device of said selected first device type and placing media in said selected device (Fig. 11 select specific media drive 1110 and mount the media on the selected drive, element 1111).

Though Leonhardt further discloses the steps of checking for a successful operation (the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation), he does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang however teaches detecting an error and determining the type of media based on comparison (Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304).

Leonhardt and Hwang are from the same field of endeavor that is the art of handling multimedia devices. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used (Hwang Col. 1 Lines 32-39).

Additionally note, though Leonhardt does not expressly disclose selecting the newest device type in the robotic media library for said first device type, Examiner took official notice in the previous Office action (mailed 7 June 2007) that selecting the newest type of media as the first type is an obvious design choice in view of the need to write data on newly implemented media in order to phase out older media.

Applicant is entitled to traverse any/all official notice taken in the previous Non-final action. MPEP § 2144.03 (section C.) states, "[in order to] adequately traverse such a finding [of Office Notice], an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241.... [i]f applicant does not traverse the examiner's assertion of official notice ... the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant ... failed to traverse the examiner's assertion of official notice...".

Since Applicant failed to traverse Examiner's assertion of Office notice in response to the previous Non-final Office action (7 June 2007), Examiner construes this limitation of selecting the newest device type as being commonly known in the art as admitted prior art, and the rejection is hereby made FINAL.

As for claim 21, Leonhardt discloses wherein said device selection control program responsive to media being placed in said selected device, performs checking for successful operation, and responsive to said successful operation, continues with a requested operation (the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation and concluding the requested operation is a natural result).

As for claim 22, Leonhardt discloses wherein said device selection control program stores a second indicator to describe each said device in said robotic media library (Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68).

As for claim 7, though Leonhardt does not expressly disclose selecting the oldest device type in the robotic media library for said first device type, Examiner took Official notice in the previous Office action (mailed 7 June 2007) that selecting the oldest type of media as the first type is an obvious design choice in view of Leonhardt. As stated previously, a skilled artisan would recognize the need to select the next older medium in order to quickly locate data, which has a higher likelihood of being stored in older media.

Applicant is entitled to traverse any/all official notice taken in the previous Non-final action. MPEP § 2144.03 (section C.) states, "[in order to] adequately traverse such a finding [of Office Notice], an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241.... [i]f applicant does not traverse the examiner's assertion of official notice ... the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant ... failed to traverse the examiner's assertion of official notice...".

Since Applicant failed to traverse Examiner's assertion of Office notice in response to the previous Non-final Office action (7 June 2007), Examiner construes this limitation of selecting the newest device type as being commonly known in the art as admitted prior art, and the rejection is hereby made FINAL.

As for claim 8, Leonhardt discloses the steps of selecting a second device of said selected next device type, placing media in said selected second device (Leonhardt Fig. 11 mount media element on selected drive 1111 will still naturally result in the event a second drive is chosen).

As for claim 9, the rejection of claim 1 above addressing the limitations presented here (with regards checking for successful operation, and selecting a next device type responsive to an unsuccessful operation, therefore this claim is rejected based on the same rationale as discussed in claim 1.

As for claim 10, Leonhardt discloses the steps of checking for successful operation, and responsive to said successful operation, continuing with a requested operation (the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation and concluding the requested operation is a natural result).

Response to Arguments

6. Applicant's arguments with respect to claims 1-3, 7-15, 19, 21 and 22 have been considered, but they are not persuasive.

7. As for pages 8-10 of the Remarks, Applicant merely sets forth a brief description of previously cited art (namely the Leonhardt and Hwang references), however no arguments are set forth, hence an Examiner's retort is not necessary at this time.

Applicant further contends (pg. 13 ll. 5-17 of Remarks) that several steps presently recited in claims 1, 13, and 19 are not suggested in the prior art references of recording including Leonhardt and Hwang. Applicant contends, "each of the independent claims 1, 13, and 19 require identifying a default value for said first indicator and then a first device type selected, and selecting a first device type including selecting a newest device type in the robotic media library for said first device type. Neither Leonhardt, nor Hwang teach or suggest these steps for implementing device selection in a robotic media library."

These arguments however are not persuasive for several reasons. First, Applicant merely asserts the teachings are not present in the cited art, however does not put forth any specific arguments justifying this position. Applicant's argument simply stating that this limitation **is not present** is therefore not persuasive, as Examiner maintains that this limitation **is present** as per the rejection discussed *supra*.

Secondly, it is worthy to note that previous Examiner took Official Notice in the previous Office action (mailed 7 June 2007) in order to assert that selecting the newest device type was obvious to Leonhardt's system, as doing so is well known in the art at the time the invention was made, and that Leonhard would have been motivated to do so in order to phase out older media (hence improving the system's capacity, speed, etc.). Applicant did not address whether or not it was well known in the art, nor whether it would have been obvious in Leonhardt's system. Rather than addressing the Official notice directly, Applicant merely asserts such a limitation is neither taught nor suggested in either Leonhardt or Hwang's disclosures. Applicant was entitled to traverse any/all official notice taken in the previous Non-final action. MPEP § 2144.03 (section C.) states, "[in order to] adequately traverse such a finding [of Office Notice], an applicant *must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art*. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241" (emphasis added by Examiner).

Continuing within this section, "[i]f applicant does not traverse the examiner's assertion of official notice ... the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant ... failed to traverse the examiner's assertion of official notice..." Since Applicant failed to traverse Examiner's assertion of Office notice in response to the previous Non-final Office action (7 June 2007), Examiner construes this limitation of selecting the newest device type as being commonly known in the art as admitted prior art, and the rejection is hereby made FINAL.

Continuing on page 11, final paragraph of Applicant's remarks, Applicant contends, "[a]s now recited in each of the independent claims 1, 13, and 19, as amended, further recite the steps selecting a device of said selected first device type and pacing [sic] media in said selected device; and responsive to media being placed in said selected device, checking for successful operation, and responsive to an unsuccessful operation, selecting a next device type. This is not suggested in the prior art references of record including Leonhardt and Hwang. As set forth above, Hwang teaches steps for identifying error operation; however, neither Leonhardt, nor Hwang teach or suggest these steps for selecting a next device type to implement device selection in a robotic media library, as taught and claimed in each of the independent claims 1, 13, and 19, as amended."

This argument however is not persuasive. More specifically, the claim requires, *inter alia*, "responsive to media being placed in said selected device, checking for

successful operation, and responsive to an unsuccessful operation, selecting a next device type". Examiner maintains that the combined teachings of Leonhardt and Hwang render this limitation obvious. Referring again to Fig. 5 of Hwang's teachings, after the system determines "a disc" is present (p, DS, n are NOT all=0 – step 501), the system selects n=2 (i.e. multi-layered DVD as the default – step 503) and checks to see if a successful operation occurs based on this assumed value of two. If n=2 is NOT compatible with the presently loaded disc, the system will move on to determine if the disc is a CD (n=1 – step 505). This process continues by checking if DS=1 if it is determined that the loaded disc is neither a single-level DVD, multi-level DVD, nor a CD in step 510. The description of this flow is further disclosed in col. 6, line 40 through col. 7, line 57 of Hwang's teachings. By checking the values of n and DS, Hwang's system responds to unsuccessful operations by selecting another device type.

To help illustrate this point, assume *arguendo*, the device type loaded in Hwang's system is a CD. The system begins the flow illustrated in Fig. 5 by checking if n=2. This would result in an "unsuccessful operation", because the disc is a CD, not a multi layer DVD (i.e. only checking the medium against n=1 will result in a successful operation). As such (as a result of the aforementioned unsuccessful operation), the system *selects the next device type* to check (e.g. CD), in which n is set to 1. Once n=1 is checked against the presently loaded medium, the system would properly assess the device as a CD. In sum, the system will continue to select the next device until a successful operation is determined.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beglin (US Patent 6,298,439) teaches an automated storage library for managing allocation of a peripheral data storage device in response to a multi-volume data set request.

Shibuya et al. (US Patent 6,104,564) teach a library apparatus having cartridge direct entry and exit mechanism.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (see § 101 rejection, *supra*). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

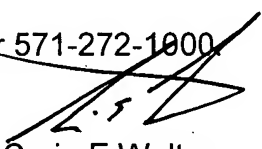
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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig E. Walter whose telephone number is (571) 272-8154. The examiner can normally be reached on 8:30a - 5:00p M-F.

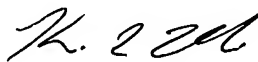
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Craig E Walter
Examiner
Art Unit 2188

CEW

Kevin L. Ellis
Primary Examiner



12/26/07